

Application No.: 09/680,156

Attorney Docket No.: EMC2-080PUS

Amendments to the Specification:

Please replace the paragraph on page 27, beginning at line 19 with the following amended paragraph:

Referring to FIG. 12, the message read operation is described. Thus, in Step 600 the director waits for a message. When a message is received, the message engine (ME) 315 state machine 410 receives the packet (Step 602). The state machine 410 checks the receive bit vector mask (FIG. 11) stored in one of the registers 399 in register section 420 against the source address of the packet (Step 604). If the state machine 410 determines that the message is from an improper source (i.e., a faulty director as indicated in the mask, FIG. 11F, for example), the packet is discarded (Step 606). On the other hand, if the state machine 410 determines that the packet is from a proper or valid director (i.e., source), the message engine (ME) 315 de-encapsulates the message from the packet (Step 608) in de-packetizer 428D. The state machine 410 in the message engine (ME) 315 initiates a 32-byte payload transfer via the DMA receive operation (Step 610). The DMA writes the 32 byte message to the memory receive queue 312R in the RAM 312 (Step 612). The message engine (ME) 315 state machine 410 then increments the receive write pointer register 450 (Step 614). The CPU 310 then checks whether the receive write pointer 450 is equal to the receive read pointer 452 (Step 616). If they are equal, such condition indicates to the CPU 310 that a message has not been received (Step 618). On the other hand, if the receive write pointer 450 and the receive read pointer 452 are not equal, such condition indicates to the CPU 310 that a message has been received and the CPU 310 processes the message in the receive queue 314R of RAM 312 and then the CPU 310 increments the receive read pointer and writes it into the receive read pointer register 452. Thus, messages are stored in the receive queue 312R of RAM 312 until the contents of the receive read pointer 452 and the contents of the receive write pointer 450, which are initialized to zero during power-up, are equal.